CLAIMS

What is claimed is:

1. A method for providing a learned upload time estimate, comprising:

reviewing historical uploading information for one or more previous uploads, wherein for each previous upload the historical uploading information includes a previous upload size and an upload start marker;

determining if there is a match or likeness between uploading information, including a new upload start marker and an upload size, in total, of one or more files presently selected for uploading, and the historical uploading information for any of the previous uploads, ; and

if a match or likeness is not found, computing an average transfer rate from the historical uploading information for the one or more previous uploads, and deriving from the average transfer rate and upload size an upload time estimate for the files presently selected for uploading and providing the upload time estimate to a user.

2. A method as in claim 1, wherein, for each previous upload, the historical uploading information further includes a number of files uploaded and a total time the previous upload actually took to complete, wherein the upload start marker is a timestamp and wherein the new upload start marker is a new timestamp.

3. A method as in claim 2, wherein, on average, the one or more files presently selected for uploading have a size, the average file size being a ratio between the upload size and number of files presently selected for upload, and wherein computing the average transfer rate includes computing a ratio between an aggregate of the previous upload sizes and an aggregate of the total times of the previous uploads, and setting the average transfer rate to that ratio unless the average file size is smaller than that ratio, in which case the average transfer rate equals the average file size per second.

4. A method as in claim 1, wherein the upload time estimate is derived by computing a ratio between the upload size and the average transfer rate.

5. A method as in claim 2, wherein, if a match or likeness is found with a particular previous upload, the method further comprises:

obtaining the total time of the particular previous upload, using its historical uploading information; and

using the total time as the upload time estimate for the files presently selected for uploading.

6. A method as in claim 2, wherein for each previous upload determining if there is a match or likeness includes:

determining an upload size difference between the previous upload size and the upload size, and

determining a difference between the upload start marker and the new upload start marker, the difference being a time difference between the timestamp and the new timestamp if the upload start marker and new upload start marker are the timestamp and new timestamp, respectively, new timestamps , wherein a match or likeness is found if the difference fits a predetermined event criteria and the upload size difference is within a predetermined range.

7. A method as in claim 6, wherein the predetermined event criteria is characterized by the timestamp and new timestamp being of the same-day and same-time or of the same-day but times differing by a predetermined period within which traffic load conditions are similar.

8. A method as in claim 6, wherein the predetermined event criteria is characterized by the timestamp and new timestamp being a weekend and weekday, respectively, or vise-versa, and times differing by a predetermined period within which traffic load conditions are similar.

9. A method as in claim 6, wherein the predetermined range is a percentage of the upload size.

10. A method as in claim 1, further comprising:

determining whether any previous uploads have been tracked; and

based on existence or nonexistence of historical uploading information for any previous uploads determining whether or not to provide the upload time estimate.

11. A method as in claim 1, further comprising:

determining whether historical upload information for the one of more previous uploads has been retrieved from a data structure; and

if not, retrieve the historical upload information for the one of more previous uploads.

12. A method as in claim 11, wherein the data structure is registry settings.

13. A method as in claim 1, wherein the historical uploading information is saved for up to a predetermined number of previous uploads.

14. A method as in claim 13, wherein the predetermined number of previous uploads is a parameter supplied by a server.

15. A method for tracking historical uploading information in order to provide a learned upload time estimate, comprising:

initiate uploading of one or more files selected for uploading and having , in total, an upload size;

saving a timestamp representing a start time of the initiated uploading;

tracking the upload of the selected files and upon completion of the upload determining the stop time and the total time the upload took,

wherein the total time, timestamp, and upload size become part of historical uploading information that is used in a subsequent upload of one or more newly selected files having, in total, a new upload size, the subsequent upload having a new timestamp, the historical upload information of previous uploads, including the just completed upload, being used in the subsequent upload to determine if information, including the upload size and new timestamp, of the newly selected one or more files matches or nearly matches the historical uploading information such that upon a failure to find a match or near match with the historical uploading information for any previous upload an average transfer rate is computed from the historical

uploading information of the previous uploads, the transfer rate and the upload size being used in providing an upload time estimate for the one or more newly selected files.

16. A method as in claim 15, wherein, for each previous upload, the historical uploading information further includes a number of files uploaded.

17. A method as in claim 16, wherein, on average, the one or more files newly selected for uploading have a size, the average file size being a ratio between the upload size and number of files presently selected for upload, and wherein computing the average transfer rate includes computing a ratio between an aggregate of the previous upload sizes and an aggregate of the total times of the previous uploads, and setting the average transfer rate to that ratio unless the average file size is smaller than that ratio and the number of files is greater than a predetermined number, in which case the average transfer rate equals the average file size per second.

18. A method as in claim 15, wherein the upload time estimate is derived by computing a ratio between the upload size and the average transfer rate.

19. A method as in claim 16, wherein if a match or near match is found the upload time estimate is set to the total time of the previous upload as to which the match or near match has been found.

20. A method as in claim 16, wherein for each previous upload determining if there is a match or near match includes:

determining an upload size difference between the upload size of that previous upload and the new upload size, and

determining a time difference between the timestamp of that previous upload and the new timestamp, wherein a match or near match is found if the time difference fits a predetermined time criteria and the upload size difference is within a predetermined range.

21. A method as in claim 20, wherein the predetermined time criteria is characterized by the timestamp of a previous upload and the new timestamp being of the same-day and same-time or of the same-day but times differing by a predetermined period within which traffic load conditions are similar.

22. A method as in claim 20, wherein the predetermined time criteria is characterized by the timestamp of a previous upload and the new timestamp being a weekend and weekday, respectively, or vise-versa, and times differing by a predetermined period within which traffic load conditions are similar.

23. A method as in claim 20, wherein the predetermined range is a percentage of the upload size.

24. A method as in claim 15, further comprising storing the historical uploading information in a data structure.

25. A method as in claim 24, wherein the data structure is registry settings.

26. A method as in claim 15, wherein the historical uploading information is saved for up to a predetermined number of previous uploads.

27. A method as in claim 26, wherein the predetermined number of previous uploads is a parameter supplied by a server.

28. A method as in claim 15, wherein the upload time estimate is provided to a user for display.

29. A computer system for providing learned upload time estimates; comprising:
a processor; and
a memory with program code for causing the processor to perform the steps of:

reviewing historical uploading information for one or more previous uploads, wherein for each previous upload the historical uploading information includes a previous upload size and an upload start marker,

determining if there is a match or likeness between uploading information, including a new upload start marker and an upload size, in total, of one or more files presently selected for uploading and the historical uploading information for any of the previous uploads, and

if a match or likeness is not found, computing an average transfer rate from the historical uploading information for the one or more previous uploads, and deriving from the average transfer rate and upload size an upload time estimate for the files presently selected for uploading and providing the upload time estimate to a client.

30. A computer system as in claim 29, wherein the computer system is operative to establish communications with the client via the Internet.

31. A computer system as in claim 29, operative to provide the upload time estimate to the client for display to an end user.

32. A computer system as in claim 29, wherein, for each previous upload, the historical uploading information further includes a number of files uploaded and a total time the previous upload actually took to complete, wherein the upload start marker is a timestamp and wherein the new upload start marker is a new timestamp.

33. A method as in claim 32, wherein, on average, the one or more files presently selected for an upload have a size, the average file size being a ratio between the upload size and number of files presently selected for uploading, and wherein computing the average transfer rate includes computing a ratio between an aggregate of the previous upload sizes and an aggregate of the total times of the previous uploads, and setting the average transfer rate to that ratio unless the average file size is smaller than that ratio and the number of files is greater than a predetermined number, in which case the average transfer rate equals the average file size per second.

34. A computer system as in claim 29, wherein the program code causes the processor to derive the upload time estimate by computing a ratio between the upload size and the average transfer rate.

35. A computer system as in claim 29, wherein, if a match or likeness is found with a particular previous upload, the program code further causes the processor to perform the steps of:

obtaining the total time of the particular previous upload, using its historical uploading information; and

using the total time as the upload time estimate for the files presently selected for uploading.

36. A computer system as in claim 30, wherein the program code for causing the processor to determine if there is a match or likeness includes further program code for causing the processor to perform, for each previous upload, the steps of:

determining an upload size difference between the previous upload size and the upload size, and

determining a difference between the upload start marker and new upload start marker, the difference being a time difference between the timestamp and the new timestamp if the upload start and new upload start markers are the timestamp and new timestamp, respectively, wherein a match or likeness is found if the time difference fits a predetermined event criteria and the upload size difference is within a predetermined range.

37. A computer system as in claim 36, wherein the predetermined event criteria is characterized by the timestamp and new timestamp being of the same-day and same-time or of the same-day but times differing by a predetermined period within which traffic load conditions are similar.

38. A computer system as in claim 36, wherein the predetermined event criteria is characterized by the timestamp and new timestamp being a weekend and weekday, respectively, or vise-versa, and times differing by a predetermined period within which traffic load conditions are similar.

39. A computer system as in claim 36, wherein the predetermined range is a percentage of the upload size.

40. A computer system as in claim 29, wherein the program code causes the processor to perform the further steps of:

determining whether any previous uploads have been tracked; and

based on existence or nonexistence of historical uploading information for any previous uploads determining whether or not to provide the upload time estimate.

41. A computer system as in claim 29, wherein the memory contains a data structure, and wherein the program code causes the processor to perform the further steps of:

determining whether historical upload information for the one of more previous uploads has been retrieved from the data structure; and

if not, retrieve the historical upload information for the one of more previous uploads.

42. A computer system as in claim 41, wherein the data structure is registry settings.

43. A computer system as in claim 29, operative to save the historical uploading information for up to a predetermined number of previous uploads.

44. A computer system as in claim 43, wherein the system includes a server operative to supply a parameter specifying the predetermined number of previous uploads.

45. A computer system as in claim 29, in which the one or more files are self-extracting executable (.exe) files or files including JPEG (Joint Photographic Experts Group) JPEG (Joint Photographic Experts Group), GIF (Graphic Interchange Format), PNG (Portable Network Graphics) or BMP (bit mapped) formatted files.

46. A computer system as in claim 29, further comprising:

a host server; and

an upload server, both the host and upload servers in communications with the client via a network.

47. A computer system as in claim 46, wherein the host server is operative to send html (hypertext markup language) pages to the client, wherein the client is operative to upload the one or more files to the upload server, and wherein the upload server is operative to indicate failure or success of file uploads.

48. A computer system as in claim 46, wherein the html pages contain features of a file uploader tool, including file selection, via browsing and drag-drop operations, and wherein the upload time estimate changes along with additional selections of files before they are uploaded to the upload server.

49. A computer system as in claim 48, wherein the files contain image data of photos and wherein further features of the uploader tool include photo preview.